Remarks

The Office Action dated October 6, 2005 has been received and duly noted. The Examiner objected to the drawings in that the characters "16" and "74" have both been used to designate the drum. The specification has been revised commencing at page 19, line 16, and now consistently refers to the drum 74 or the drum assembly 16.

Figure 2 shows the drum assembly 16, and Figure 5 shows the rotating drum 74. The drum assembly 16 includes a rotating drum which also reciprocates, and is disclosed at column 20, commencing at line 14. In view of the above, Applicant respectfully submits that new drawings should not be required in view of the specification amendments.

Claims 83-86, and 98-113 were objected as failing to comply with the enablement requirement. The Examiner indicated he cannot find disclosure for rotating the product in a drum and reciprocating the drum linearly. This disclosure may be found at page 21 commencing at line 1, which discloses drive motor 72 for rotating the drum, in combination with the disclosure at page 25 commencing at line 26, which discloses a rounded tray fitting over a rotating drum and engaging the liner, so that the drum and the liner both rotate and reciprocate. As shown on Figures 3 and 5, the frame 70 clearly is not rotated and is not part of the drum, but instead is a housing in which the drum rotates. Accordingly, Applicant submits the disclosure is enabling, since the disclosure teaches both reciprocation and rotation of the drum, and since the frame 70 does not rotate.

Claim 13 has been amended to delete the objectionable term "slow" noted by the

Examiner, and recites that forward movement and is less than backward movement speed.

Claims 83, 84, 98-101, 104 and 108 were rejected as being unpatentable over Harding in view of Pearson. Applicant acknowledges that Harding teaches a rotary drum. The tray 5 is movable by the cylinder 6, but does not reciprocate the drum. With respect to Pearson, the Examiner contends that the drum is linearly moved in a forward/backward manner. The patent does not disclose, however, moving the drum in a forward/backward manner to slide the product along the drum and thereby discharge the product from the drum, with the forward movement speed being less than the backward movement speed, as recited in Claim 83. In the contrary, the drum is rotated in a reverse direction so that the scoop-like extensions 222a serve to move the contents of the drum into discharge chute 250. The mechanism as disclosed in the '691 Patent is thus entirely different than the mechanism recited in the present application for moving the drum in a forward/backward manner, with the forward movement speed being less than the backward movement speed, to thereby discharge product from the drum. Pearson reciprocates the drum to significantly reduce the time to plate metal products, which is of no concern to either Harding or the present invention. Moreover, Pearson nowhere discloses mechanically attaching a tray to the drum to reciprocate the drum. The Harding tray, even if reciprocated somehow by the drive mechanism of Pearson, would have no effect on moving the drum since the tray and the drum of Harding are not mechanically connected. Also, Pearson has no input tray to the drum, and instead uses a batch process to plate the metal products.

Neither Harding or Pearson, or their reasonable combination, teach the method recited in Claim 83.

With respect to dependent Claim 84, neither of the references teach driving a product tray to move the product tray longitudinally along the product tray, and fixing the tumble drum to the product tray such that the tumble drum and the product tray move in a forward/backward manner to move the product along the product tray and the tumble drum. Pearson does not provide a product tray, and the tray as disclosed in Harding is not fixed to the drum.

Regarding dependent Claim 98, the claim has been revised to depend upon Claim 84, and recites both lining the tumble drum with a plastic material liner, and engaging the product tray and the liner to move the drum in a forward/backward manner. None of the cited references disclose engaging the product tray and the liner to move the drum as recited in Claim 98. With respect to Claims 99 and 100, neither Harding nor Pearson disclose inwardly projecting ribs each having first and second flight surfaces on the plastic material liner, such that the rotating product is tumbled as a function of the direction of the tumble drum. None of the cited references disclose powering the product tray to move the food product longitudinally along the product tray. Regarding dependent Claim 101, this claim depends upon 84 which recites fixing the tumble drum and the product tray, and further recites powering the product tray to move the food product longitudinally along the product tray in a forward/backward manner, the forward movement speed being less than

the backward movement speed. Again, this combination is not recited in either Harding or Pearson. Dependent Claim 104 has been amended to recite uniformly distributing a curtain of seasoning on a product upstream of the drum. None of the cited references teach uniformly distributing a curtain of seasoning on the product, as recited in Claim 104.

With respect to Claims 85, 102, 103, 105, 106, 109, 111 and 113, the Examiner contends that Harding teaches conveying the product via a tray, but is silent on sensing an upper level of product in the product tray and producing a feed signal functionally related to the volume of the product conveyed. As noted above, Harding discloses a tumble drum and a tray, but the tray and the tumble drum are not interconnected, and as a consequence the movement of the tray, which is in a vertical direction and not movement substantially aligned with the axis of the drum to move goods through the drum, would have no effect on sliding product along the tray to move the product through the drum. Leverenz discloses coating a food product with seasoning, but Leverenz does not disclose sensing the food product level without contacting the product, which is a significant feature as recited in Claims 85, 102 and 109, and does not disclose driving the product tray to move the product along the tray with a forward movement speed being less than a backward movement speed in response to the product feed rate signal. Moreover, the drum in Leverenz does not reciprocate in the manner recited in Claim 1. With respect to Claim 105, none of the cited references disclose controlling a seasoning auger driven by an auger motor in response to the product feed rate signal. Regarding Claim 106, Leverenz does not

disclose adjusting a feed rate of product to the product tray in response to the product feed rate signal, and at best discloses the general concept of adjusting the feed rate of product to a tray which does not move in a forward/backward manner to move product along the tray by controlling the forward speed to be less than the backward speed, as recited in Claim 84.

With respect to Claim 86, Behnke discloses spraying a food product with liquid, but neither this reference nor Pearson or Behnke disclose reciprocating the drum as recited in independent Claim 83. Moreover, dependent Claim 86 has been revised to recite that the product is sprayed with a liquid before the product enters the drum.

With respect to Claim 107, Groves discloses a computer as a control processor, but does not disclose or suggest automatically controlling movement of a product tray and thus the quantity of product moving along the product tray and into the drum in response to the operator input signals. More particularly, Groves does not disclose inputting product to a drum with a product tray, and instead discloses a batch process for loading animal products into the tumbler at a selected level then rotating the tumbler.

Dependent Claim 112 has been revised like Claim 86 to recite that the product is sprayed with liquid before the product enters the drum. The product is discharged from the tumble drum by reciprocating the tumble drum, with a forward movement speed being less than the backward movement speed as recited in Claim 83. In Pearson, the drum is rotated in a reverse direction so that the scoop-like extensions 222a serve to move the

contents of the drum into discharge chute 250. The mechanism as disclosed in the '691 Patent is thus entirely different than the mechanism recited in the present application for moving the drum in the forward/backward manner, with the forward movement speed being less than the backward movement speed, to thereby discharge product from the tumble drum. Moreover, Pearson nowhere discloses mechanically attaching a tray to the drum to reciprocate the drum. The Harding tray, even if reciprocated somehow by the drive mechanism of Pearson, would have no effect on moving the drum since the tray and the drum of Harding are not mechanically connected.

Early allowance of the application is requested.

Respectfully submitted,

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